

Notice of Allowability

Application No.

10/698,678

Examiner

An H. Do

Applicant(s)

CHOWDRY ET AL.

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 31 October 2003.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☒ The drawings filed on 31 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Stephen D. Meler
Primary Examiner

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-11 are allowed.

Reasons for Allowance

2. The primary reason for the allowance of claims 1 and 6 is the inclusion of the limitations of a mechanism for concentrating in the image concentrating process zone the respective particles of the primary image so as to form on the operational surface a concentrated image from the primary image, the mechanism causing the particles to become concentrated adjacent the operational surface; a mechanism for removing in the excess liquid removal process zone a portion of the respective carrier liquid from the concentrated image so as to form on the operational surface a liquid-depleted image; and a mechanism for forming on each operational surface a regenerated operational surface for a subsequent formation thereon of a new primary image, the regeneration process zone associated in proximity with the intermediate member at a location between the transfer process zone and the ink jet device; wherein the primary image includes a plurality of smallest resolved imaging areas and each of which receives a preselected number of droplets including zero. It is these limitations found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

3. The primary reason for the allowance of claims 8 and 9 is the inclusion of the method steps of causing a portion of the carrier liquid from the primary images to be removed so as to form a liquid-depleted image; transferring the respective liquid-depleted images to the receiver member in registry superposed on the liquid-depleted images previously transferred to the receiver member; and prior to the step of forming primary images, regenerating the operational surfaces of respective intermediate members to prepare the operational surfaces for receiving a new primary image from the ink jet device. It is these steps found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

4. The primary reason for the allowance of claims 10 and 11 is the inclusion of the method steps of removing a portion of excess liquid from the particles so as to form an ink-jet-ink-deprived particulate image having the color; and transferring the ink-jet-ink-deprived particulate image from the operational surface to the receiver member in register with any ink-jet-ink-deprived particulate image having another color previously transferred in register to the receiver member. It is these steps found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Takemoto (US 6,196,674) discloses an inkjet recording method of using two liquids with the first liquid is deposited on the intermediate transfer medium

Art Unit: 2853

and then transferred onto a recording medium. Takei et al (US 5,841,456) discloses a transfer printing apparatus having ink drops ejected onto a transfer drum, the ejected ink includes a dispersion medium and coloring material absorbed by a dispersion absorbing member. Jones et al (US 5,805,191) discloses an apparatus and method of applying, distributing and metering a liquid layer on a support surface of the intermediate transfer surface. Ozawa et al (US 5,365,261) discloses a transfer type inkjet printer having an inkjet printhead for ejecting droplets of ink including coloring particles have been dispersed in a solvent, a transfer medium for carrying and moving the image, and a pressure roller for transferring the ink image to the recording medium.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to An H. Do whose telephone number is 571-272-2143. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



AD
March 31, 2004



Stephen D. Meier
Primary Examiner